

**REMARKS**

The present application is directed to methods for detecting cancer by combining mammalian autoantibodies with a patient sample to determine whether cancer-associated marker proteins are present in the sample. The autoantibodies demonstrate a superior affinity for cancer-associated marker proteins, thereby enabling early cancer detection and the ability to commence treatment and enhance cancer patient survival.

Claims 2-4, 52-56, 61-63 and 66 have been amended to more particularly point out and distinctly claim the subject matter that applicants regard as their invention. Claim 1 is cancelled herein without prejudice. Claims 5-51 were previously cancelled. Cancellation of these claims should not be considered a forfeiture of this subject matter, and applicants reserve the right to pursue the cancelled subject matter in divisional applications. Upon entry of this amendment, Claims 2-4 and 55-66 will be pending.

**Rejections under 35 U.S.C. §112, second paragraph**

In the Office Action mailed February 11, 2005, the Examiner rejected Claim 1 under 35 U.S.C. §112, second paragraph, for failing to distinctly claim the subject matter regarded as the invention. Applicants respectfully submit that the amendments to the claims overcome the rejection.

Applicants have cancelled Claim 1. The limitations of Claim 1 have been incorporated into Claims 2, 55, 56 and 61. However, the phrase that the Examiner found to be unclear has been omitted.

**Rejections under 35 U.S.C. §102**

The Examiner rejected Claims 1, 3-4, 52-54, and 62-66 under 35 U.S.C. §102 as anticipated by Rao *et al.* (*Am J. Obstet. Gynecol.* July 1998, 159:94-98; "Rao"). Applicants respectfully submit that the amendments to the claims overcome the rejection.

Applicants note that Claims 2 and 55-60 were not rejected, but were objected to as being dependent from a rejected base claim.

Claim 1 has been cancelled. Claims 3-4 have been amended to depend from amended Claim 55, which has been rewritten in independent form containing all the limitations of the base claim. Claims 52-54 have been amended to depend from amended Claim 2, which has been rewritten in independent form containing all the limitations of the base claim. Claims 62-63 have been amended to depend from amended Claim 2. Claims 64-65 now depend indirectly from amended Claim 2. Claim 66 has been amended to specify that the cancer-associated marker protein is a breast cancer associated marker protein, the subject matter of Claim 55, which was not rejected.

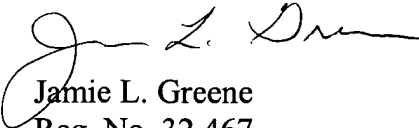
Claims 56 and 61 were also objected to as depending from a rejected base claim. Claims 56 and 61 have been rewritten in independent form containing all the limitations of the base claim.

### **CONCLUSION**

Applicants respectfully submit that the pending claims define patentable subject matter. Accordingly, applicants respectfully request allowance of these claims. No additional fees are believed due, however, the Commissioner is hereby authorized to charge any deficiencies which may be required, or credit any overpayment, to Deposit Account Number 11-0855.

Early and favorable consideration is earnestly solicited. If the Examiner believes any informalities remain in the application that can be resolved by telephone interview, a telephone call to the undersigned is respectfully solicited.

Respectfully submitted,

  
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